ABSTRACT

A multi-fluid heat exchanger having separate fluid flow paths for two fluid streams to be heated or cooled by a third fluid stream includes first and second elongated, parallel tubular headers (10, 12), having opposed ends (14), generally uniformly spaced elongated tube slots (16) in each of the headers (10, 12) with the tube slots (16) in one header (10) facing and aligned with the tube slots (16) and the other header (12), a plurality of flattened tubes (20) extending between the headers (10, 12) and having ends (22) received in aligned ones of the tube slots (16), one tube slot (24) in each header being unoccupied by any of the flattened tubes (20), the one tube slots (24) being aligned with each other and located at a predetermined location between the ends (14) of the headers (10, 12) and between two groups (A, B) of the flattened tubes (20) so there are two groups of the flattened tubes (20) on each side of the one tube slot (24), a pair of baffles (30) in each header (10, 12) with one on each side of the one tube slot (24) and fins (26, 32) extend between and are in heat transfer relation with at least the adjacent tubes (20) in each of the groups (A, B).